Title (en)

PROCESS FOR PRODUCING FUNCTIONALIZED POLYMERS

Title (de)

VERFAHREN ZUR HERSTELLUNG FUNKTIONALISIERTER POLYMERE

Title (fr)

PROCÉDÉ DE PRODUCTION DE POLYMÈRES FONCTIONNALISÉS

Publication

EP 3458488 A1 20190327 (EN)

Application

EP 17733206 A 20170519

Priority

- US 201662338764 P 20160519
- US 2017033525 W 20170519

Abstract (en)

[origin: WO2017201397A1] A method for method for preparing a functionalized polymer, the method comprising the steps of preparing an active polymerization mixture including a reactive polymer by polymerizing conjugated diene monomer with a lanthanide-based catalyst; introducing a heterocyclic nitrile compound with the reactive polymer to form a functionalized polymer within the polymerization mixture; introducing a quenching agent to the polymerization mixture including the functionalized polymer, where the ratio of water or protic hydrogen atoms in the quenching agent to the lanthanide atoms in the lanthanide-based catalyst is less than 1500 to 1.

IPC 8 full level

C08F 36/06 (2006.01); **C08C 19/22** (2006.01); **C08C 19/44** (2006.01); **C08F 236/06** (2006.01)

CPC (source: EP US)

C08C 19/22 (2013.01 - EP US); **C08C 19/44** (2013.01 - EP US); **C08F 6/003** (2013.01 - EP US); **C08F 36/06** (2013.01 - EP US); **C08F 136/06** (2013.01 - US); **C08F 236/06** (2013.01 - EP US); **C08K 5/13** (2013.01 - US); **C08K 5/18** (2013.01 - US); **C08K 5/524** (2013.01 - US); C08F 2810/00 (2013.01 - US)

Citation (search report)

See references of WO 2017201397A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

WO 2017201397 A1 20171123; CN 109415457 A 20190301; CN 109415457 B 20210525; EP 3458488 A1 20190327; EP 3458488 B1 20201230; JP 2019518829 A 20190704; JP 7014489 B2 20220201; US 2019185598 A1 20190620; US 2022153885 A1 20220519

DOCDB simple family (application)

US 2017033525 W 20170519; CN 201780039641 A 20170519; EP 17733206 A 20170519; JP 2018560573 A 20170519; US 201716302930 A 20170519; US 202217587597 A 20220128